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MTNHP site and community survey manual

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MTNHP SITE AND COMMUNITY SURVEY MANUAL

version 91B

Montana Natural Heritage Program
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MTNHP SITE AND COMMUNITY FORM MANUAL

Montana Natural Heritage Program
1515 East 6th Ave., Helena, MT 59620

This manual is for use in completing the 5/27/91 versions of the Site Survey and Community Survey forms. Only those fields potentially needing greater clarification are included. Definitions for many of the fields on the Community Survey Form are taken directly from the USDA Forest Service's ECODATA General Field and Plant Composition data forms (developed at the Forest Service Regional Office, Missoula, MT). See last two pages of manual for copies of survey forms.

SITE SURVEY FORM INSTRUCTIONS

IDENTIFICATION AND LOCATION

MANUAL

Enter the version number of the MTNHP survey manual used in completing this form (i.e., "91B" for this manual).

SITENAME

Each site should be assigned a unique name. A few standards in naming follow:

1. do not use element names in the site name
2. use local place names when available
3. use names of features on topographic maps when local names do not exist

DIRECTIONS

Directions to Site - enter precise directions to the site using a readily locatable landmark (e.g., a city, a major highway, etc.) as the starting point on a state or local road map. Use clear complete sentences that will be understandable to someone who is unfamiliar with the area, needs to get to the site, and has only your directions to follow. Cite distances as closely as possible to the 1/10 of a mile, use compass directions (N, S, E, and W), and be sure to specify the best access to the site, such as where to park or which trail to use.

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1. anthropogenic forces that threaten the existence of one or more element occurrences at the site

2. the inability to undertake a management action in the absence of a protection action

MANAGEMENT URGENCY

A management action may include biological management (e.g., prescribed burning, removal of exotics) or people and site management (e.g., building barriers to prevent ORV use, rerouting trails, patrolling for collectors, hunters, or trespassers). Management action does not include legal, political, or administrative measures taken to protect the site.

STEWARDSHIP

LAND USE COMMENTS

Describe current and past land use, improvements and structures. Discuss the stewardship implications of this use.

Uses to consider: recreation, dumping, agriculture, mining, grazing, etc. Discuss the possibility of hazardous or toxic waste disposal on site including reasons as to why it may or may not be a problem.

POTENTIAL HAZARDS

Describe potential natural hazards (e.g., cliffs, caves, waterfalls, etc.) on the site and indicate any precautions stewardship should take.

EXOTIC FLORA/FAUNA COMMENTS

Describe potentially damaging exotic (i.e., alien) flora and fauna (e.g., cheatgrass, leafy spurge, knapweed, feral cats, horses, etc.) on the site. Indicate their location and abundance, as well as their effect on the viability of endangered elements. Indicate also how stewardship will manage or control the exotic species and whether local ordinances require such control.

OFF-SITE CONSIDERATIONS

Describe off-site land uses (e.g., farming, logging, grazing, dumping, watershed diversion, etc.) and how those uses might affect the site, elements on the site, and management of the site.

SITE AND ELEMENT MANAGEMENT NEEDS

Summarize the expected management needs for the site and the elements on it. Include routine items such as need for fencing, restricting use, grazing, control of exotics, burning, etc.

COMMUNITY SURVEY FORM INSTRUCTIONS

IDENTIFICATION AND LOCATION

MANUAL

Enter the version number of the MTNHP survey manual used in completing this form (i.e., "91B" for this manual).

UNITS (one-character code)

Units of Length - enter "X" in the appropriate space to describe if the units of length or height being entered are feet or meters.

PLOT NUMBER (seven-character alphanumeric code)

Record in order the year (2-digits), the first and second initial of the principal examiner (2-characters), and the plot ascension number (3-digits).

> Example: The 33rd plot sampled in 1991 by Hank Gleason would be entered as 91HG033.

EOCODE (14-character alphanumeric code)

Element Occurrence Code - enter this code in the field only if it's known. Record in order the MTNHP element code (10-characters), a period, and occurrence ascension number (3-digits).

> Example: The 23rd occurrence of the Douglas-fir/little bluestem plant association would be entered as C2ABBABF0.023.

PNC

Potential Natural Community - if the PNC is questionable, make notes concerning the problem either in this field or in the "Comments" field.

CT

Community Type - in many cases, the CT and PNC will be equivalent. If the CT is questionable, make notes concerning the problem either in this field or in the "Comments" field.

SITE

Surveysite - name assigned to the plot site at the time it is sampled. In many cases, this name will be equivalent to the "Sitename" given on the Site Survey Form, except will include modifiers to differentiate this specific plot from the general site.

> Example: A plot in the eastern portion of the Block Mountain Standard Site might have the Surveysite name "Block Mountain East".

A few standards in naming follow:

1. do not use element names in the site name
2. use local place names when available
3. use names of features on topographic maps when local names do not exist

PURP (one-character code)

Purpose - enter one of the following codes explaining why the data was collected. If more than one code applies, enter "I":

F - evaluation of fire effect, fire history, or fuels
C - TES plant species habitat analysis
G - TES animal species habitat analysis
W - general wildlife habitat analysis
B - big game habitat analysis
M - range monitoring (e.g., readiness, trend, utilization)
V - correlation of vegetation with soil survey
D - evaluation of watershed erosion, rehabilitation, or cover
Z - research plot
L - correlation or classification for spectral or LANDSAT data
J - RNA and SIA analysis
E - new classification or succession study
I - integrated multi-resource inventory and monitoring
H - data to strengthen existing classification
X - other purpose not listed here

PREC (one-character code)

Precision to which the plot can be located on a topographic map is defined as follows:

S second - mappable within a three-second radius

M minute - mappable within a one-minute radius

(approximately 2 km or 1.5 miles)

G general - mappable to quad or place name precision only (precision within about 8 km or 5 miles)

COMMUNITY SIZE (acres)

Total size of the continuous community occurrence (not plot size).

PLOT TYPES (up to five-character code)

Up to five of the following 1-digit codes listing the types of forms completed for this plot:

S - Site Survey Form
C - Community Survey Form
M - Microplot Vegetation Data Form
T - Tree Measurement Form
E - Soil Characterization Form
R - Reconnaissance Soil Characterization Form

PLTRL (up to three-digit number)

Plot Radius or Length - enter plot radius (for circular plots) or length (for rectangular plots). Indicate units of measurement.

Note: a 375 m^2 plot has a radius of 10.9 m (35.8 ft)
a 50 m^2 plot has a radius of 4.0 m (13.1 ft)

PLOT W (up to three-digit number)

Plot Width - enter width if a rectangular plot shape is used. Enter 0 (numeric) if a circular plot shape is used. Indicate units of measurement.

SURVEY (five-character alphanumeric code)

Character 1 - method of locating plot. Enter one of the following:

A - plot subjectively located to represent vegetation in occurrence (typically used in inventory)

B - plot subjectively located to represent stand, and will be used to monitor vegetation change through

time with or without treatment

C - plot is part of series of replicated plots systematically or randomly located within occurrence to describe the occurrence

E - plot is part of series of replicated plots systematically or randomly located in treatment or control area to measure vegetation change with treatment over time

F - plot is part of predetermined stratified sampling design (e.g., gradsect)

Character 2 - photo taken of plot? Enter Y or N.

Character 3 - permanency and location of plot. Enter one of the following:

N - plot not permanent, the exact location unknown

P - permanent plot marked with stakes or measurements to permanent features, and location and layout are marked on map

L - plot not permanent, but location accurately marked on 1:24,000 or larger scale map or aerial photo to about 100 feet

G - plot not permanent, and location known only within general geographic area

Characters 4 and 5 - for use with re-measurement plots. Enter re-measurement ascension number (e.g., 01 for initial measurement; 06 for sixth measurement). Leave blank otherwise.

PHOTOS

Indicate how many photos were taken of the plot and any details regarding the photo(s), e.g., "One photo taken looking N across entire plot".

DIRECTIONS

Directions to Plot - enter precise directions to the plot using a readily locatable landmark (e.g., a city, a major highway, etc.) as the starting point on a state or local road map. Use clear complete sentences that will be understandable to someone who is unfamiliar with the area, needs to get to the plot, and has only your directions to follow. Cite dis-

tances as closely as possible to the 1/10 of a mile, use compass directions (N, S, E, and W), and be sure to specify the best access to the plot, such as where to park or which trail to use.

CONSERVATION RANKING

Grade the community occurrences condition, viability, and defensibility according to the following scale:

A - excellent
B - good
C - marginal
D - poor
F - terrible

COND (one-character code)

Condition - base grade on how much of the site and the community occurrence itself has been damaged or altered from its optimal condition and character. Provide comments on condition grade.

VIAB (one-character code)

Viability - base grade on the long-term prospects for continued existence of the occurrence. Provide comments on viability grade.

DEFN (one-character code)

Defensibility - base grade on the extent to which the occurrence can be protected from extrinsic human factors that might otherwise degrade or destroy it. Provide comments on defensibility grade.

RANK (one-character code)

Summary grade of the condition, viability, and defensibility grades listed. Provide comments on this overall grade, i.e., EORANKCOM.

MGMT

Management Comments - comment on any management (new or additional) needed to ensure continued existence of the

community occurrence, and chances (and means) of bringing it about. Any other pertinent comments go here as well, e.g., "... clearing of competing vegetation has been tried in the past but without success".

PROT

Protection Comments - comment on any legal protection (new or additional) needed to ensure continued existence of the community occurrence, and chances (and means) of bringing it about. Any other pertinent comments go here as well, e.g., "... landowner shows interest in taking action to legally protect community occurrence".

ENVIRONMENTAL FEATURES

DL (one-character code)

Dominant Life Form - enter one of the following codes to describe the dominant live life form currently present on the plot (Note: dominate life form = life form with the greatest foliar volume):

A - aquatic species dominate
B - broadleaf trees dominate
C - coniferous trees dominate
F - forbs dominate
G - graminoids dominate
H - herbs (graminoid/forb mixture) dominate
M - moss or lichens dominate
N - non-vegetated soil
P - agricultural cropland
R - rock or scree
S - shrubs dominate

SOIL RPT

Soil Survey Report - cite the soil survey report used to identify the "Soil Unit" and "Soil Taxon". If none, enter "-".

Example: "Soil Survey of Madison County (SCS 1989)"

SOIL UNIT

Enter the appropriate map unit symbol from the soil survey map of the area. If none, enter "-".

SOIL TAXON

Enter the appropriate soil subgroup name from the soil survey report for the area. If not known, enter "-".

PM (four-character code)

Parent Material - enter the appropriate parent material code from the list below:

Sedimentary
SETU - type unknown
LIME - limestone
DOLO - dolomite
SAND - sandstone
CASA - calcareous sandstone
SILT - siltstone
CASI - calcareous siltstone
SHAL - shale
RESH - red shale
CASH - calcareous shale
CONG - conglomerate
CACO - calcareous conglomerate

Metamorphic
METU - type unknown
ARGI - argillite
CAAR - calcareous argillite
SILI - siltite
QUAR - quartzite
SLAT - slate
PHYL - phyllite
SCHI - schist
BISC - biotite schist
MISC - mica schist
GNBG - gneiss and biotite gneiss

Igneous
IGTU - type unknown
BASA - basalt (including obsidian)
ANDE - andesite
DIGA - diorite to gabbro
LATI - latite
QUMO - quartz monzonite
TRSY - trachyte and syenite
RHYO - rhyolite
GRBG - granite and biotite granite
WETU - welded tuff (tufa)
SCOR - scoria (porcelanite), clinker

Miscellaneous
GRAL - gravelly alluvium
SAAL - sandy alluvium
SIAL - silty alluvium
CLAL - clayey alluvium
MIAL - mixed alluvium
GLTI - glacial till, mixed origin
ASHT - ash (of any origin)
MISE - mixed sedimentary
MIME - mixed metamorphic
MIIG - mixed igneous
LOES - loess
MIRT - mix of two or more rock types
DUNE - sand dunes

LANDFORM (four-character code)

Enter the appropriate geomorphic landform code from the list below:

General Landform Type	Code	Refined Landform Type
residual mountain slopes and ridges	RMTU	type unknown
	RMDS	dissected straight slopes
	RMDC	dissected convex slopes
	RMUS	undissected slopes
	RMRI	ridges
	RMDE	depressions
glaciated mountain slopes and ridges	GMTU	type unknown
	GMUS	undissected slopes
	GMDS	dissected slopes
	GMRI	ridges
alpine glacial valleys	AVTU	type unknown
	AVTB	trough bottoms
	AVUT	undissected troughwalls
	AVDT	dissected troughwalls
	AVAP	avalanche paths and debris fans
alpine glacial ridges	ARTU	type unknown
	ARCB	cirque basins
	ARCH	cirque headwalls and alpine ridges
	ARUU	undulating uplands

General Landform Type	Code	Refined Landform Type
rolling uplands	RUTU	type unknown
	RULR	low relief rolling uplands
	RULD	low relief uplands, dense drainage
	RUMR	moderate relief rolling uplands
	RUDR	dissected rolling uplands
breaklands	BLTU	type unknown
	BLDR	dissected river breaks
	BLUR	undissected river breaks
	BLSB	structural breaks
	BLSH	stream headlands
structurally controlled mountain slopes	SCTU	type unknown
	SCDS	dip slopes
	SCDR	dipping layered rocks
	SCPL	plateaus
glacial till forms	GTTU	type unknown
	GTMO	moraines
	GTDL	drumlins
	GTKK	kames and kettles
alluvial-colluvial-lacustrine forms	ACTU	type unknown
	ACFP	flood plains
	ACTE	terraces
	ACAF	alluvial fans
	ACCF	colluvial fans
	ACBT	colluvial basins and toeslopes
	ACAB	alluvial basins
mass wasted slopes	MWTU	type unknown
	MWLS	landslides

PLOT POS (four-character code)

Plot Position - enter the appropriate code from the list below to describe the topographic position of the plot:

General Plot Position	Code	Refined Plot Position
narrow valley bottom (<100 feet wide)	NVTU	type unknown
	NVSC	stream channel
	NVSB	stream bar
	NVLE	levee (narrow flood plain overbank deposits)
	NVCD	colluvial deposit (colluvial fan)
moderate valley bottom (100-300 feet wide)	MVTU	type unknown
	MVSC	stream channel
	MVSB	stream bar
	MVFP	flood plain (incl. levees if appropriate)
	MVAM	abandoned meander
	MVOX	oxbow
	MVBS	backwater slough
	MVTE	terrace
	MVAF	alluvial fan (toeslope)
wide valley bottom (>300 feet wide)	WVTU	type unknown
	WVSC	stream channel
	WVSB	stream bar
	WVFP	flood plain (incl. levees if appropriate)
	WVAM	abandoned meander
	WVOX	oxbow
	WVBS	backwater slough
	WVTE	terrace
	WVAF	alluvial fan (toeslope)
slope features	SLTU	type unknown
short slope	SLSS	short slope, neither upper nor lower (<100 ft)
lower slope	SLLS	lower slope
	AFLS	lower slope of alluvial fan (fan skirt)
mid slope	SLMS	mid slope
	AFMS	mid slope of alluvial fan
upper slope	SLUS	upper slope
	AFUS	upper slope of alluvial fan

General Plot Position	Code	Refined Plot Position
shoulder	SHDR	shoulder
ridge	RINR	narrow ridge (<100 ft wide)
	RIWR	wide ridge summit (>100 ft wide)
bench	BNCH	bench in mountainous terrain

SLP SHAPE (one-character code)

Slope Shape - enter one of the following codes to indicate the vertical shape of the slope on which the plot lies:

S - straight or even
R - rounded or convex
D - depression or concave
P - patterned (micro-relief of hummocks and swales)
U - undulating pattern of low ridges or knolls and draws
X - other

ASP (up to three-digit number)

Aspect - enter the direction of the slope on which the plot occurs (in degrees; corrected for declination).

SLOPE % (up to three-digit number)

Enter the steepness of the slope on which the plot occurs (in percent).

EROS POTENT (two-character code)

Erosion Potential - enter one of the following codes to indicate the potential for erosion on the plot:

SA - soil surface is stable with no evidence of accelerated erosion

UC - soil surface is unstable because of compaction

UD - soil surface is unstable because of displacement and/or churning of the soil

UP - soil surface is unstable because of lack of protective vegetation cover

UA - unable to assess

EROS TYPE (two-character code)

Enter one of the following codes to indicate the dominant type of erosion occurring on the plot:

NO - none
SE - sheet erosion
RE - rill erosion
GE - gully erosion
DE - deposition
WE - wind erosion
SC - soil creep
SL - slump (earth flow)
TD - terrace development
SL - slide

HORIZON ANGLE (%) (up to three-digit numbers)

Record the angles to the four horizons (in percent).

IFSLP (up to three-digit number)

If "General Plot Position" is sloping (i.e., > 3% slope), estimate distance from top of slope to upper edge of plot. Indicate units of measurement.

IFVAL (up to three-digit number)

If "General Plot Position" is level (i.e., 0 - 3% slope), estimate distance across valley or flat (passing through plot). Indicate units of measurement.

SPFE

List any special features of the site on which the plot is located (if desirable, describe these features under "General Site Description"). If none described, enter "NA".

Examples: avalanche chute, talus, seep, etc.

GROUND COVER (two-digit codes)

Enter cover class code for each of the following types of ground cover:

S - bare soil (particles < 1/16 in. dia.)
G - gravel (particles 1/16 to 3 in. dia.)
R - rock (particles > 3 in. dia.)
L - litter and duff. Litter includes freshly-fallen leaves, needles, twigs, bark, fruits; duff is fermentation layer and humus layer.
W - wood (downed fragments > 1/4 in. dia.)
M - moss. Also includes Lycopodium and Selaginella.
BV - basal vegetation. This is the area occupied by root crowns and stems, not canopy cover. Values rarely exceed 30% and are usually lower.
O - other. Use when an additional category is needed. Identify the "other" item (e.g., lichen; water).

Use the following cover classes and codes:

Code	Class	Midpoint
0	0%	0%
1	< 1%	0.5%
3	1% to 4.9%	3%
10	5% to 14.9%	10%
20	15% to 24.9%	20%
30	25% to 34.9%	30%
40	35% to 44.9%	40%
50	45% to 54.9%	50%
60	55% to 64.9%	60%
70	65% to 74.9%	70%
80	75% to 84.9%	80%
90	85% to 94.9%	90%
98	95% to 100%	97.5%

RIPARIAN FEATURES

If the plot is within the riparian zone record the following information (indicate units of measurement as appropriate):

Channel Width (up to three-digit number) - if valley contains multiple channels, give width of channel nearest to the plot.

Channel Entrenchment (up to three-digit number) - depth to which channel has cut into valley floor.

Surface Water (two-digit code) - estimate of maximum ground cover of surface water on plot during the year (use cover classes listed above under "Ground Cover").

Height Above Water (up to three-digit number) - height of plot above stream or pond surface when water is at bank-full stage (water at bank-full stage reaches lower limit of terrestrial vegetation).

Distance from Water (up to three-digit number) - distance from water at bank-full stage to nearest plot edge.

GENERAL SITE DESCRIPTION

Description (a "word picture") of the place where the sampled community occurs. (Any specific information about the plot itself should be written into the "Comments" field following the "Ocular Plant Species Data"). Consider the setting of the community occurrence in the surrounding landscape (including landscape features and adjacent community types).

OCULAR PLANT SPECIES DATA

This portion of the form is used for recording plant species data by lifeform class, i.e., "Trees", "Shrubs", "Graminoids", and "Forbs".

For all cover estimates, use the codes from the following cover class table:

Code	Class	Midpoint
1	< 1%	0.5%
3	1% to 4.9%	3%
10	5% to 14.9%	10%
20	15% to 24.9%	20%
30	25% to 34.9%	30%
40	35% to 44.9%	40%
50	45% to 54.9%	50%
60	55% to 64.9%	60%
70	65% to 74.9%	70%
80	75% to 84.9%	80%
90	85% to 94.9%	90%
98	95% to 100%	97.5%

PltIDL (two-digit code)

Plant Identification Level - enter the two-digit number that represents the percent of canopy cover equal to or greater than which all plants are to be identified. For example, "5" indicates that all plant species having 5% canopy cover or greater would be recorded; "0" indicates all plant species have been recorded.

Tot Cv (two-digit code)

Total Cover - estimate the percent canopy cover for the respective lifeform. This estimate is not the sum of all species in the lifeform and does not count overlap. It is the horizontal percent cover of the vertical projection of the lifeform.

Tal Cv (two-digit code)

Tall Height Cover - estimate "Total Cover" (as described above) by life form for individuals taller than 5 m (16.4 ft).

Med Cv (two-digit code)

Medium Height Cover - estimate "Total Cover" (as described above) by life form for individuals between 0.5 and 5 m tall (1.6 - 16.4 ft).

Low Cv (two-digit code)

Low Height Cover - estimate "Total Cover" (as described above) by life form for individuals between 0.05 and 0.5 m tall (0.2 - 1.6 ft).

Grd Cv (two-digit code)

Ground Height Cover - estimate "Total Cover" (as described above) by life form for individuals shorter than 0.05 m (0.2 ft).

MHt (three-digit code)

Mean Height - estimate the mean height of the dominant size class within the respective lifeform. Indicate units of measurement.

CC (two-digit code)

Canopy Cover - enter the appropriate canopy cover code listed above for each species in each lifeform.

T1, T2, S1, etc.

List each species within a lifeform using the following convention: full scientific binomial, code name (first three letters of genus and first three letters of the specific epithet), and canopy cover code (see "CC" above).

Example: T1 Pinus ponderosa / PINPON ¦ 40

COMMENTS (EODATA)

Specific information regarding the community occurrence at the site, e.g., numbers, size, condition, peculiar characteristics, viability.

AREA	SPECIES	LOCATION
Armstead	Red-tailed Hawk	T11S,R08W,S32,SENWSW
Bannack	Long-eared Owl	T07S,R11W,S03,NENENE
	Red-tailed Hawk*	T07S,R11W,S35,SWSWNW
	Red-tailed Hawk	T07S,R11W,S02,NWNWSE
	American Kestrel	T07S,R11W,S34,SWNENE
	Prairie Falcon	T08S,R11W,S04,NWSESW
	Prairie Falcon	T07S,R11W,S36,SWNWSW
Block Mtn.	Red-tailed Hawk	T04S,R08W,S36,NENWSW
	Golden Eagle	T04S,R08W,S23,SESENW
Diamond Butte	Swainson's Hawk	T14S,R06W,S04,SENWSW
	Swainson's Hawk	T15S,R07W,S02,NESENE
	Red-tailed Hawk	T15S,R07W,S12,NESWNE
Frying Pan	Golden Eagle	T06S,R09W,S28,NWNESW
	Prairie Falcon	T06S,R09W,S17,SESWSW
	Prairie Falcon	T06S,R09W,S25,SENWSE
	American Kestrel	T06S,R09W,S28,NWNWNW
	American Kestrel	T06S,R09W,S28,NWNWSE
Henneberry Ridge	Prairie Falcon	T09S,R10W,S08,NENENE
	Prairie Falcon	T09S,R11W,S02,SWSESE
	Prairie Falcon	T09S,R10W,S19,SESESE
	American Kestrel	T09S,R10W,S07,NESESE
Vinegar Hill	Golden Eagle	T13S,R07W,S05,SENWSW
	Golden Eagle	T13S,R08W,S02,SWNWSE
	Prairie Falcon	T12S,R07W,S20,SESENW
Sweetwater	Golden Eagle	T09S,R05W,S04,SWSWNE
Incidental	Long-eared Owl	T14S,R04W,S06,NESENE

* Krider's Hawk ♂ x Dark morph ♀

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. F-03 MO 07 DAY 30 YEAR 92 EOCODE ___ *___
EXAMINER(s) Pam Bourington Eric Atkinson
PNC Artemisia tridentata / Agropyron spicatum CT ___
SITE Irving Pon Nhita STATE MT COUNTY READ
PURP W PREC S QUADNAME BOND QUADCODE 4511236
65 T/ 9W R/ 17S/ SW 4S/ SE 4/4 COMMUNITY SIZE (acres) ___
PLOT TYPES C PLTRL 35.8 PLOT W ___ SURVEY AVL
PHOTOS ___
DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___
VIAB ___ Com: ___
DEFN ___ Com: ___
RANK ___ Com: ___

MGMT: ___
PROT: ___

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: 30 S+ 10 G+ 30 R+ 22 L+ 1 W+ ___ M+ 10 BV+ ___ O ___ = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H20 ___ Dist. from H20 ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ___

PLOT NO. 6-23 NO. SPECIES 15 PNC ARTTRI / AGRSPI

TREES Tot Cv — MHt ___
Tal Cv ___ Med Cv ___
Low Cv ___ Grd Cv ___

		CC
T 1	/	
T 2	/	
T 3	/	
T 4	/	
T 5	/	

SHRBS Tot Cv 40 MHt 1.5'
Tal Cv — Med Cv 20
Low Cv 20 Grd Cv 10

		CC
S 1	Artemesia frigida / ARTFRI	10
S 2	Artemesia tridentata / ARTTRI	20
S 3	Opuntia polyacantha / OPUPOL	10
S 4	Chrysothamnus nauseosus / CHRNAU	10
S 5	Ribes spp / RIB	1
S 6	/	
S 7	/	
S 8	/	
S 9	/	
S10	/	
S11	/	
S12	/	

GRAM Tot Cv 30 MHt 1'
Med Cv 3 Low Cv 30
Grd Cv 1

		CC
G 1	Bouteloua gracilis / BOUGRA	10
G 2	Poa sandbergii / POASAN	1
G 3	Agropyron spicatum / AGRSPI	20
G 4	Oryzopsis hymenoides / ORYHYM	T
G 5	/	
G 6	/	
G 7	/	
G 8	/	
G 9	/	
G10	/	
G11	/	
G12	/	

FRBS Tot Cv 1 MHt .4'
Med Cv — Low Cv 1
Grd Cv T

		CC
F 1	Phlox hoodii / PHLHOO	1
F 2	Astragalus drummondii / ASTDRU	T
F 3	Chenopodium fremontii / CHEFRE	T
F 4	Gripdelia squarrosa / GRESQU	T
F 5	Balsamorhiza sagittata / BALSAG	T
F 6	Lithospermum ruderale / LITRUD	T
F 7	/	
F 8	/	
F 9	/	
F10	/	
F11	/	
F12	/	
F13	/	
F14	/	
F15	/	

FERN Tot Cv ___ MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___

BRYO / LICH Tot Cv 10

COMMENTS (EODATA) --> ___

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. F-04 MO 07 DAY 30 YEAR 92 EOCODE ___ *___
EXAMINER(s) Pam Harrington Eric Atkinson
PNC Artemisia tridentata / Agropyron spicatum CT ___
SITE Buckshot STATE MT COUNTY BEAV
PURP W PREC S QUADNAME ARGENTA QUADCODE 4511237
65 T/ 9W R/ 18 S/ SW4S/ SE 4/4 COMMUNITY SIZE (acres)
PLOT TYPES C PLTRL 35.8 PLOT W ___ SURVEY AVL
PHOTOS
DIRECTIONS -->

CONSERVATION RANKING

COND ___ Com:
VIAB ___ Com:
DEFN ___ Com:
RANK ___ Com:

MGMT:
PROT:

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: 10 S+ 20 G+ 30 R+ 10 L+ 10 W+ ___ M+ 10 BV+ 10 O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)-->

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H20 ___ Dist. from H20 ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ___

PLOT NO. E-54 NO. SPECIES 11 PNC ARTTRI / AGRSPI

TREES Tot Cv — MHt ___
Tal Cv ___ Med Cv ___
Low Cv ___ Grd Cv ___

		CC
T 1	/	
T 2	/	
T 3	/	
T 4	/	
T 5	/	

SHRBS Tot Cv 40 MHt 1.5'
Tal Cv — Med Cv 10
Low Cv 20 Grd Cv 20

		CC
S 1	Artemisia tridentata / ARTTRI	20
S 2	Chrysothamnus nauseosus / CHRNAU	10
S 3	Opuntia polyacantha / OPUPOL	1
S 4	Artemisia frigida / ARTFRI	10
S 5	Cercocarpus ledifolius / CERLED	3
S 6	/	
S 7	/	
S 8	/	
S 9	/	
S10	/	
S11	/	
S12	/	

GRAM Tot Cv 20 MHt 1'
Med Cv 3 Low Cv 30
Grd Cv —

		CC
G 1	Oryzopsis hymenoides / ORYHYM	20
G 2	Agropyron spicatum / AGRSPI	20
G 3	/	
G 4	/	
G 5	/	
G 6	/	
G 7	/	
G 8	/	
G 9	/	
G10	/	
G11	/	
G12	/	

FRBS Tot Cv 3 MHt .2'
Med Cv — Low Cv 1
Grd Cv 3

		CC
F 1	Sphaeralcea coccinea / SPHCOC	1
F 2	Senecio canus / SENCAN	T
F 3	Lappula redowskii / LAPRED	T
F 4	Eriogonum microthecum / ERIMIC	3
F 5	/	
F 6	/	
F 7	/	
F 8	/	
F 9	/	
F10	/	
F11	/	
F12	/	
F13	/	
F14	/	
F15	/	

FERN Tot Cv ___ MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___

BRYO/LICH Tot Cv 10

COMMENTS (EODATA) --> ___

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS V ft __ m

PLOT NO. E-15 MO 07 DAY 30 YEAR 92 EOCODE ___ ___ *___

EXAMINER(s) Pam Harrington Eric Atkinson

PNC Artemisia tridentata / Agropyron spicatum CT ___

SITE Mountain Valley STATE MT COUNTY BEAV

PURP G PREC S QUADNAME BOND QUADCODE 45 112 36

6S T/ 9W R/ 8 S/ NE 4S/ SE 4/4 COMMUNITY SIZE (acres) ___

PLOT TYPES C PLTRL 35.8 PLOT W ___ SURVEY Ayl

PHOTOS ___

DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___

VIAB ___ Com: ___

DEFN ___ Com: ___

RANK ___ Com: ___

MGMT: ___

PROT: ___

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT ___

SOIL UNIT ___ SOIL TAXON ___

PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___

SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___

HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___

SPFE ___

GROUND COVER: 10 S+ 20 G+ 30 R+ 10 L+ 10 W+ ___ M+ 10 BV+ 10 O = 100%

DISTURBANCE HISTORY (type, intensity, frequency, season)--> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___

Surface Water ___ Ht.Abv.H2O ___ Dist. from H2O ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL C-10

PLOT NO. E-05 NO. SPECIES M PNC ARTTRI / AGRSPI

TREES Tot Cv — MHt___ Tal Cv___ Med Cv___ Low Cv___ Grd Cv___

		CC
T 1	/	
T 2	/	
T 3	/	
T 4	/	
T 5	/	

SHRBS Tot Cv 40 MHt 1.5' Tal Cv — Med Cv 20 Low Cv 20 Grd Cv 3

		CC
S 1 Artemisia tridentata	/ ARTTRI	30
S 2 Salix ssp	/ SAL	1
S 3 Eutiecrezia spathulae	/ EUTSPA	3
S 4 Artemisia frigida	/ ARTFRI	1
S 5 Grindelia polycephala	/ GRIPOL	1
S 6 Chrysothamnus nauseosus	/ CHRNAU	1
S 7	/	
S 8	/	
S 9	/	
S10	/	
S11	/	
S12	/	

GRAM Tot Cv 30 MHt 1' Med Cv — Low Cv 30 Grd Cv 10

		CC
G 1 Bouteloua gracilis	/ BOUGRA	10
G 2 Elymus elymoides	/ ELYELE	10
G 3 Koeleria cristata	/ KOECRI	20
G 4	/	
G 5	/	
G 6	/	
G 7	/	
G 8	/	
G 9	/	
G10	/	
G11	/	
G12	/	

FRBS Tot Cv 30 MHt .4' Med Cv — Low Cv 30 Grd Cv 1

		CC
F 1 Eriogonum compositum	/ ERICOM	T
F 2 Potentilla pensylvanica	/ POTPEN	T
F 3 Chenopodium fremontii	/ CHEFRE	T
F 4 Spiranthes romanzoffiana	/ SPIROM	1
F 5 Descurainia richardsonii	/ DESRIC	T
F 6 Lappula redowskii	/ LAPRED	T
F 7 Geum triflorum	/ GEUTRI	T
F 8 Phlox multiflora	/ PHEMUL	T
F 9 Eriogonum pumilum	/ ERIPUM	1
F10 Stephanomeria tenuifolia	/ STETEN	30
F11	/	
F12	/	
F13	/	
F14	/	
F15	/	

FERN Tot Cv___ MHt___ Med Cv___ Low Cv___ Grd Cv___

BRYO/LICH Tot Cv___

COMMENTS (EODATA) --> Plot is on the ledge of a large rock outcrop — A 35.4 radius plot would not have included the rock outcrop and a sample including an area 5' out from the rock.

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL — UNITS X ft __m
PLOT NO. F-06 MO 07 DAY 31 YEAR 92 EOCODE — *__
EXAMINER(s) Pam Harrington Eric Atkinson
PNC Agropyron spicatum / Poa sandbergii CT —
SITE Wire Creek West STATE MT COUNTY BEAV
PURP G PREC S QUADNAME CORRAL CREEK QUADCODE 4411252
14S T/ 4W R/ 29 S/ NW 4S/ SW 4/4 COMMUNITY SIZE (acres) ____
PLOT TYPES C PLTRL 35.8 PLOT W — SURVEY AVL
PHOTOS ____
DIRECTIONS --> ____

CONSERVATION RANKING

COND ___ Com: ____
VIAB ___ Com: ____
DEFN ___ Com: ____
RANK ___ Com: ____

MGMT: ____
PROT: ____

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT —
SOIL UNIT — SOIL TAXON —
PM — LANDFORM ____ PLOT POS — SLP SHAPE — ASP ____
SLOPE % ____ ELEVATION ____ EROS POTENT — EROS TYPE —
HORIZON ANGLE (%): N__ E__ S__ W__ IFSLP — IFVAL —
SPFE —
GROUND COVER: 50 S+ 20 G+ 3 R+ 1 L+ T W+ — M+ 10 BV+ T O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width — Channel Entrench —
Surface Water — Ht.Abv.H20 — Dist. from H20 —

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ____

PLOT NO. E-06 NO. SPECIES 210 PNC ACL SPI / POA SAN

TREES Tot Cv ____ MHt ____
Tal Cv ____ Med Cv ____
Low Cv ____ Grd Cv ____

		CC
T 1	/	
T 2	/	
T 3	/	
T 4	/	
T 5	/	

SHRBS Tot Cv 10 MHt 1'
Tal Cv — Med Cv T
Low Cv 10 Grd Cv T

		CC
S 1	Artemesia frigida / ART FRI	3
S 2	Chrysothamnus viscidiflorus / CHR VIS	1
S 3	Amelanchier utahensis / AME UTA	3
S 4	Rosa arkansana / ROS ARK	1
S 5	Artemesia nana / ART NAN	3
S 6	Sueda sp. occidentalis / SUA	1
S 7	Ceratoides lanata / CER LAN	1
S 8	Artemesia tripartita / ART TRI	3
S 9	/	
S10	/	
S11	/	
S12	/	

GRAM Tot Cv 30 MHt 1'
Med Cv 10 Low Cv 20
Grd Cv 1

		CC
G 1	Poa sandbergii / POA SAN	T
G 2	Agropyron spicatum / AGR SPI	10
G 3	Oryzopsis hymenoides / ORY HYM	10
G 4	Stipa occidentalis / STI OCC	20
G 5	/	
G 6	/	
G 7	/	
G 8	/	
G 9	/	
G10	/	
G11	/	
G12	/	

FRBS Tot Cv 3 MHt 3'
Med Cv — Low Cv T
Grd Cv 3

		CC
F 1	Allium cernuum / ALL CER	T
F 2	Senecio canus / SEN CAN	1
F 3	Penstemon aridus / PEN ARI	T
F 4	Linum perenne / LIN PER	T
F 5	Physaria didymocarpa / PHY DID	T
F 6	Heterotheca horrida / HET HOR	T
F 7	Hymenopappus polycephalus / HYM POL	1
F 8	Phoenicaulis douglasii / CHA DOU	1
F 9	Erigeron pumilus / ERI PUM	1
F10	Taraxacum officinale / TAR OFF	T
F11	Tragopogon dubius / TRA DUB	T
F12	Phlox hoodii / PHL HOO	T
F13	Draba oligosperma / DRA OLI	T
F14	Antennaria parvifolia / ANT PAR	T
F15	/	

FERN Tot Cv — MHt ____ Med Cv ____
Low Cv ____ Grd Cv ____

BRYO/LICH Tot Cv T

COMMENTS (EODATA) --> ____

Wyo. dunlop

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. F-07 MO 07 DAY 31 YEAR 92 EOCODE ___ *___
EXAMINER(S) Pam Harrington Eric Atkinson
PNC Artemisia tridentata / Agropyron spicatum CT ___
SITE Lateral Moraine STATE MT COUNTY BEAV
PURP G PREC S QUADNAME BIG TABLE MTN QUADCODE 44112 S1
14S T/ 4W R/ 28S/ NL4S/ SE4/4 COMMUNITY SIZE (acres) ___
PLOT TYPES C PLTRL 35.8 PLOT W ___ SURVEY AYL
PHOTOS ___
DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___
VIAB ___ Com: ___
DEFN ___ Com: ___
RANK ___ Com: ___

MGMT: ___
PROT: ___

ENVIRONMENTAL FEATURES

DI Conifer SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: 3 S+ 1 G+ — R+ 70 L+ — W+ — M+ 20 BV+ — O + = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H20 ___ Dist. from H20 ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ____

PLOT NO. E-07 NO. SPECIES 36 PNC ARTTRI / AGRSPI

TREES Tot Cv 40 MHt 23'
Tal Cv 40 Med Cv —
Low Cv — Grd Cv —

			CC
T 1	Pseudotsuga menziesii	PSEMEN	40
T 2	0		
T 3			
T 4			
T 5			

SHRBS Tot Cv 60 MHt 9'
Tal Cv — Med Cv 40
Low Cv 30 Grd Cv —

			CC
S 1	Artemesia tridentata	ARTTRI	40
S 2	Potentilla fruticosa	PENFRU	20
S 3	Rosa arkansana	ROSARK	10
S 4	Artemesia tripartita	ARTTRI	10
S 5	Prunus spp	PRU	30
S 6	Chrysothamnus viscidiflorus	CHRVIS	3
S 7	Ribes spp	RIB	1
S 8			
S 9			
S10			
S11			
S12			

GRAM Tot Cv 90 MHt 1'
Med Cv 20 Low Cv 70
Grd Cv 10

			CC
G 1	Poa pratensis	POAPRA	70
G 2	Bromus tectorum	BROTEC	3
G 3	Koeleria cristata	KOECRI	10
G 4	Hordeum brachyantherum	HORBRA	10
G 5	Carex hitchcockiana	CARHIT	T
G 6			
G 7			
G 8			
G 9			
G10			
G11			
G12			

FRBS Tot Cv 20 MHt .4'
Med Cv — Low Cv 3
Grd Cv 20

			CC
F 1	Achillea millefolium	ACHMIL	1
F 2	Geum triflorum	GEITRI	1
F 3	Allium cernuum	ALLCER	1
F 4	Erigeron pumilus	ERIPUM	T
F 5	Antennaria microphylla	ANTPAR	1
F 6	Taraxacum officinale	TAROFF	10
F 7	Erigeron compositus	ERICOM	T
F 8	Hydrotheca hirsuta	HETHIR	T
F 9	Gaillardia aristata	GAIARI	T
F10	Pseudocymopterus tenuifolius	PSOTEN	T
F11	Chaenactis douglasii	CHADOU	1
F12	Senecio integerrimus	SENINT	T
F13	Erigeron linearis	ERILIN	T
F14	Phlox hoodii	PHLHOO	T
F15	Sedum lanceolatum	SEDLAN	1
	Castilleja spp	CAS	T
	Frasera albomarginata	FRAALB	10
	Lupinus sericeus	LUPSER	1
	Cirsium spp	CIR	T
	Tragopogon dubius	TRADUB	T
	Linum perenne	LINPER	T
	Cynoglossum officinale	CYNOFF	1
	Iris missouriensis	IRIMIS	T

FERN Tot Cv ___ MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___

BRYO/LICH Tot Cv ___

COMMENTS (EODATA) --> _____

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. F-05 MO 07 DAY 31 YEAR 92 EOCODE ___ *___
EXAMINER(s) Pam Herrington Eric Atkinson
PNC Rhus trilobata / Agropyron spicatum CT ___
SITE Rim N. Ca. NRA STATE MT COUNTY BEAV
PURP IG PREC S QUADNAME MONIDA QUADCODE 4411253
14S T/ 5W R/ 35 S/ NE 4 S/ NE 4/4 COMMUNITY SIZE (acres) ___
PLOT TYPES C PLTRL 25.8 PLOT W ___ SURVEY AVL
PHOTOS ___
DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___
VIAB ___ Com: ___
DEFN ___ Com: ___
RANK ___ Com: ___

MGMT: ___
PROT: ___

ENVIRONMENTAL FEATURES

DL Deciduous SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N ___ E ___ S ___ W ___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: 30 S+ ___ G+ ___ R+ 20 L+ 10 W+ 20 M+ 20 BV+ ___ O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H20 ___ Dist. from H20 ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL C-16

PLOT NO. F-07 NO. SPECIES 18 PNC KHUTRI / AGRSPI

TREES Tot Cv 50 MHt 15'
Tal Cv 50 Med Cv —
Low Cv — Grd Cv —

			CC
T 1	Ulmus spp	ULM	50
T 2			
T 3			
T 4			
T 5			

SHRBS Tot Cv 10 MHt 2'
Tal Cv 10 Med Cv 3
Low Cv — Grd Cv —

			CC
S 1	Ribes spp	RIB	3
S 2	Pentaphylloides floribunda	PEN FLO	3
S 3	Rosa arkansana	ROS ARK	3
S 4			
S 5			
S 6			
S 7			
S 8			
S 9			
S10			
S11			
S12			

GRAM Tot Cv 95 MHt 3'
Med Cv 50 Low Cv 50
Grd Cv —

			CC
G 1	Poa pratensis	POA PRA	40
G 2	Alopecurus alpinus	ALO ALP	30
G 3	Hordeum brachyantherum	HOR BRA	20
G 4	Beckmannia syzigachne	BEC SYZ	50
G 5	Carex pachystachya	CAR PAC	20
G 6			
G 7			
G 8			
G 9			
G10			
G11			
G12			

FRBS Tot Cv 20 MHt 1'
Med Cv 10 Low Cv 10
Grd Cv 3

			CC
F 1	MENTHA spp	MEN	T
F 2	Cynoglossum officinale	CYNOFF	10
F 3	Achillea millifolium	ACHMIL	T
F 4	Geum macrophyllum	GEUMAC	1
F 5	Senecio integerrimus	SENINT	10
F 6	Machaeranthera canescens	MACCAN	T
F 7	Potentilla anserina	POTANS	3
F 8	Taraxicum officinale	TAROFF	3
F 9	Erigeron pumilus	ERIPUM	T
F10			
F11			
F12			
F13			
F14			
F15			

FERN Tot Cv — MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___

BRYO LICH Tot Cv T

COMMENTS (EODATA) -->

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. F-09 MO 07 DAY 31 YEAR 92 EOCODE ___ *___
EXAMINER(s) Pam Harrington Eric Atkinson
PNC Rhus trilobata / Agropyron spicatum CT ___
SITE Monida Mtn. STATE MT COUNTY BEAV
PURP G PREC S QUADNAME MONIDA QUADCODE 44112 53
14S T/ 4W R/ 35S/ SW4S/ NE 4/4 COMMUNITY SIZE (acres) ___
PLOT TYPES C PLTRL 35.9 PLOT W ___ SURVEY AYL
PHOTOS ___
DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___
VIAB ___ Com: ___
DEFN ___ Com: ___
RANK ___ Com: ___

MGMT: ___
PROT: ___

ENVIRONMENTAL FEATURES

DL Deciduous SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: ___ S+ ___ G+ ___ R+ 50 L+ / W+ ___ M+ 20 BV+ ___ O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H20 ___ Dist. from H20 ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ____

PLOT NO. E-09 NO. SPECIES 10 PNC RHUTRI / AGRSPI

TREES Tot Cv 30 MHt 18'
Tal Cv 30 Med Cv —
Low Cv — Grd Cv —

		CC
T 1	Salix spp / SAL	30
T 2		
T 3		
T 4		
T 5		

SHRBS Tot Cv 50 MHt 10'
Tal Cv — Med Cv 50
Low Cv — Grd Cv —

		CC
S 1	Salix spp / SAL	50
S 2	Ribes spp / RIB	3
S 3	Artemisia ludoviciana / ARTLUD	1
S 4		
S 5		
S 6		
S 7		
S 8		
S 9		
S10		
S11		
S12		

GRAM Tot Cv 30 MHt 1'
Med Cv 10 Low Cv 20
Grd Cv —

		CC
G 1	Carex pachystachya / CARPAC	10
G 2	Poa pratensis / POAPRA	10
G 3	Alopecurus alpinus / ALOALP	10
G 4		
G 5		
G 6		
G 7		
G 8		
G 9		
G10		
G11		
G12		

FRBS Tot Cv 20 MHt 1.5'
Med Cv 10 Low Cv 10
Grd Cv —

		CC
F 1	Bellis macrophyllum / BELMAC	10
F 2	Galium boreale / GALBOR	T
F 3	Senecio integerrimus / SENINT	3
F 4	Cirsium spp / CIR ⁂	3
F 5	Lewisia pygmaea / LEWPYG	T
F 6		
F 7		
F 8		
F 9		
F10		
F11		
F12		
F13		
F14		
F15		

FERN Tot Cv — MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___
BRYO/LICH Tot Cv —

COMMENTS (EODATA) --> ____

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. E-10 MO 07 DAY 31 YEAR 92 EOCODE ___ *___
EXAMINER(s) Tom Harrington Eric Atkinson
PNC Artemisia tridentata / Agropyron spicatum CT ___
SITE Bench Isla Flat SE Jupiter STATE MT COUNTY BEAV
PURP G PREC S QUADNAME MONIDA QUADCODE 44112 S3
14S T/ 6W R/ 33S/ SE4S/ SE4/4 COMMUNITY SIZE (acres)___
PLOT TYPES C PLTRL 35X PLOT W ___ SURVEY AXL
PHOTOS
DIRECTIONS -->

CONSERVATION RANKING

COND ___ Com:
VIAB ___ Com:
DEFN ___ Com:
RANK ___ Com:

MGMT:
PROT:

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: 30 S+ T G+ — R+ 50 L+ — W+ — M+ 20 BV+ — O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)-->

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H2O ___ Dist. from H2O ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ____

PLOT NO. E-10 NO. SPECIES 12 PNC ART TRI / AGR SPP

TREES Tot Cv — MHt ___
Tal Cv ___ Med Cv ___
Low Cv ___ Grd Cv ___

		CC
T 1	/	
T 2	/	
T 3	/	
T 4	/	
T 5	/	

SHRBS Tot Cv 60 MHt 1'
Tal Cv — Med Cv 20
Low Cv 50 Grd Cv —

		CC
S 1	Artemesia tridentata / ARTTRI	40
S 2	Kutierrezia sarothrae / GUTSAR	30
S 3	Artemesia tripartita / ARTTRI	10
S 4	/	
S 5	/	
S 6	/	
S 7	/	
S 8	/	
S 9	/	
S10	/	
S11	/	
S12	/	

GRAM Tot Cv 60 MHt .5'
Med Cv — Low Cv 20
Grd Cv 50

		CC
G 1	Poa sandbergii / POASPP	40
G 2	Agropyron smithii / AGRSMI	40
G 3	Koeleria macrantha / KOEMAC	10
G 4	Carex filifolia / CAREIL	3
G 5	/	
G 6	/	
G 7	/	
G 8	/	
G 9	/	
G10	/	
G11	/	
G12	/	

FRBS Tot Cv 3 MHt 2'
Med Cv — Low Cv 1
Grd Cv 3

		CC
F 1	Draba oligosperma / DRAOLI	3
F 2	Linum perenne / LINPER	T
F 3	Erigeron pumilus / ERIPUM	1
F 4	Commandra umbellata / COMUMB	1
F 5	Phlox hoodii / PHLHOO	1
F 6	/	
F 7	/	
F 8	/	
F 9	/	
F10	/	
F11	/	
F12	/	
F13	/	
F14	/	
F15	/	

FERN Tot Cv — MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___
BRYO/LICH Tot Cv —

COMMENTS (EODATA) --> ____

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. F-11 MO 07 DAY 31 YEAR 92 EOCODE ___ *___
EXAMINER(s) Ron Harrington Eric Atkinson
PNC Admiralty Intermontane Aggregation spiralatum CT ___
SITE Diamond Bird Nest STATE MT COUNTY BEAV
PURP G PREC S QUADNAME MONIDA QUADCODE 4411253
155T/ 6W R/ 8 S/ NE4S/ SE 4/4 COMMUNITY SIZE (acres) ___
PLOT TYPES C PLTRL 35.8 PLOT W ___ SURVEY AXL
PHOTOS ___
DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___
VIAB ___ Com: ___
DFRN ___ Com: ___
RANK ___ Com: ___

MGMT: ___
PROT: ___

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N ___ E ___ S ___ W ___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: 10 S+ 50 G+ 20 R+ 10 L+ ___ W+ ___ M+ 10 BV+ ___ O ___ = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season) --> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H20 ___ Dist. from H20 ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ____

PLOT NO. E-11 NO. SPECIES 13 PNC ARTTRI / AGRSPI

TREES Tot Cv ___ MHt ___
Tal Cv ___ Med Cv ___
Low Cv ___ Grd Cv ___

		CC
T 1		
T 2		
T 3		
T 4		
T 5		

SHRBS Tot Cv 30 MHt 1'
Tal Cv — Med Cv 3
Low Cv 30 Grd Cv 3

		CC
S 1	Artemesia tridentata / ARTTRI	20
S 2	Purshia tridentata / PURTRI	20
S 3	Rosa Arkansana / ROSARK	1
S 4		
S 5		
S 6		
S 7		
S 8		
S 9		
S10		
S11		
S12		

GRAM Tot Cv 20 MHt 1.5'
Med Cv 10 Low Cv 20
Grd Cv —

		CC
G 1	Bromus tectorum / BROTEC	10
G 2	Agropyron spicatum / AGRSPI	10
G 3	Elymus cinereus / ELYCIN	10
G 4		
G 5		
G 6		
G 7		
G 8		
G 9		
G10		
G11		
G12		

FRBS Tot Cv 20 MHt .5'
Med Cv 1 Low Cv 3
Grd Cv 20

		CC
F 1	Actengalina spp / AST	1
F 2	Arabis holboellii / ARAHOL	T
F 3	Eriogonum umbellatum / ERIUMB	10
F 4	Machaeranthera canescens / MACCAN	1
F 5	Phacelia hastata / PHAHAS	3
F 6	Chaenactis douglasii / CHADOU	1
F 7	Lupinus sericeus / LUPSER	1
F 8		
F 9		
F10		
F11		
F12		
F13		
F14		
F15		

FERN Tot Cv — MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___
BRYO/LICH Tot Cv —

COMMENTS (EODATA) --> _____

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m

PLOT NO. F-12 MO 07 DAY 31 YEAR 92 EOCODE ___ *___

EXAMINER(s) Pam Harrington Eric Atkinson

PNC Artemisia tridentata / Agropyron spicatum CT ___

SITE Foothill Mat. STATE MT COUNTY BEAV

PURP G PREC S QUADNAME SNOWLINE QUADCODE 4911254

15S T/ 6W R/ 7 S/ SW4S/ SW4/4 COMMUNITY SIZE (acres) ___

PLOT TYPES C PLTRL 25.Y PLOT W ___ SURVEY AVL

PHOTOS ___

DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___

VIAB ___ Com: ___

DEFN ___ Com: ___

RANK ___ Com: ___

MGMT: ___

PROT: ___

ENVIRONMENTAL FEATURES

DI Conifer SOIL RPT ___

SOIL UNIT ___ SOIL TAXON ___

PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___

SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___

HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___

SPFE ___

GROUND COVER: / S+ — G+ — R+ 80 L+ 3 W+ — M+ 20 BV+ — O = 100%

DISTURBANCE HISTORY (type, intensity, frequency, season)--> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___

Surface Water ___ Ht.Abv.H2O ___ Dist. from H2O ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ____

PLOT NO. F-12 NO. SPECIES 19 PNC ART TRI / AGR SPI

TREES Tot Cv 30 MHt 22'
Tal Cv 30 Med Cv 1
Low Cv 1 Grd Cv —

			CC
T 1	Pseudotsuga menziesii	PSE MEN	30
T 2	U		
T 3			
T 4			
T 5			

SHRBS Tot Cv 50 MHt 2'
Tal Cv — Med Cv 10
Low Cv 20 Grd Cv —

			CC
S 1	Artemisia tridentata	ART TRI	20
S 2	Symphoricarpos sp.	SYM	30
S 3	Ribes sp.	RIB	30
S 4	Chrysothamnus nauseosus	CHRNAU	20
S 5			
S 6			
S 7			
S 8			
S 9			
S10			
S11			
S12			

GRAM Tot Cv 40 MHt 1.5'
Med Cv 30 Low Cv 20
Grd Cv —

			CC
G 1	Stipa comata	STICOM	10
G 2	Agropyron spicatum	AGRSPI	10
G 3	Bromus japonicus	BROJAP	T
G 4	Festuca idahoensis	FESIDA	10
G 5	Stipa occidentalis	STIOCC	30
G 6			
G 7			
G 8			
G 9			
G10			
G11			
G12			

FRBS Tot Cv 10 MHt .5'
Med Cv — Low Cv 10
Grd Cv 3

			CC	
F 1	Achillea millefolium	ACHMIL	1	
F 2	Eriogonum umbellatum	ERIUMB	1	F-11
F 3	Berberis repens	BERREP	1	
F 4	Draba oligosperma	DRAOLI	1	
F 5	Arenaria kingii	ARENKI	3	
F 6	Lupinus sericeus	LUPSER	T	F-11
F 7	Gallium boreale	GALBOR	1	F-09 ✓
F 8	Delphinium bicolor	DELBIC	1	
F 9	Erysimum inconspicuum	ERYINC	T	
F10				
F11				
F12				
F13				
F14				
F15				

FERN Tot Cv — MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___

BRYO/LICH Tot Cv —

COMMENTS (EODATA) --> _____

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL — UNITS X ft m
PLOT NO. F-13 MO 08 DAY 01 YEAR 92 EOCODE — *
EXAMINER(s) Dan Harrington Eric Atkinson
PNC Cercocarpus ledifolius/Agropyron spicatum CT —
SITE Vinegar Hill STATE MT COUNTY BEAV
PURP G PREC S QUADNAME VINEGAR HILL QUADCODE 4411274
12S T/ 7W R/ 28 S/ SE 4 S/ SE 4/4 COMMUNITY SIZE (acres)
PLOT TYPES C PLTRL 35.2 PLOT W — SURVEY AYL
PHOTOS
DIRECTIONS -->

CONSERVATION RANKING

COND — Com:
VIAB — Com:
DEFN — Com:
RANK — Com:

MGMT:
PROT:

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT —
SOIL UNIT — SOIL TAXON —
PM — LANDFORM — PLOT POS — SLP SHAPE — ASP —
SLOPE % — ELEVATION — EROS POTENT — EROS TYPE —
HORIZON ANGLE (%): N — E — S — W — IFSLP — IFVAL —
SPFE —
GROUND COVER: 30 S+ 10 G+ 10 R+ 30 L+ 10 W+ — M+ 10 BV+ — O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)-->

RIPARIAN FEATURES: Channel Width — Channel Entrench —
Surface Water — Ht.Abv.H20 — Dist. from H20 —

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ____

PLOT NO. F-13 NO. SPECIES 24 PNC CERIED / AGR SPE

TREES Tot Cv — MHt ___ Tal Cv ___ Med Cv ___ Low Cv ___ Grd Cv ___

		CC
T 1		
T 2		
T 3		
T 4		
T 5		

SHRBS Tot Cv 50 MHt 3' Tal Cv — Med Cv 40 Low Cv 20 Grd Cv 3

			CC
S 1	Cercocarpus ledifolius	CER LED	40
S 2	Artemisia tridentata	ART TRI	10
S 3	Artemisia frigida	ART FRI	3
S 4	Chrysothamnus nauseosus	CHR NAU	3
S 5			
S 6			
S 7			
S 8			
S 9			
S10			
S11			
S12			

GRAM Tot Cv 50 MHt 1' Med Cv 20 Low Cv 20 Grd Cv 3

			CC
G 1	Oryzopsis hymenoides	ORY HYM	20
G 2	Agropyron spicatum	AGR SPI	30
G 3	Stipa comata	STI COM	1
G 4	Muhlenbergia cuspidata	MUH CUS	10
G 5			
G 6			
G 7			
G 8			
G 9			
G10			
G11			
G12			

FRBS Tot Cv 20 MHt .5' Med Cv — Low Cv 10 Grd Cv 10

			CC
F 1	Linum perenne	LIN PER	3
F 2	Astragalus (two sites)	ASTR	1
F 3	Potentilla gracilis	POT GRA	T
F 4	Tragopogon dubius	TRA DUB	T
F 5	Hymenoxys polycephala	HYM POL	T
F 6	Antennaria parvifolia	ANT PAR	1
F 7	Machaeranthera canescens	MAC CAN	T
F 8	Stanleya viridiflora	STA VIR	T
F 9	Aralia aligosperma	ARA ALI	T
F10	Lewisia pygmaea	LEW PYG	T
F11	Eriogonum strictum	ERI STR	T
F12	Sedum lanceolatum	SED LAN	T
F13	Chamaechaenactis douglasii	CHA DOU	T
F14	Astragalus drummondii	AST DRU	T
F15	Taraxacum officinale	TAR OFF	10

FERN Tot Cv — MHt ___ Med Cv ___ Low Cv ___ Grd Cv ___

BRYO/LICH Tot Cv —

COMMENTS (EODATA) --> _____

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. f-14 MO 07 DAY 01 YEAR 92 EOCODE ___ *___
EXAMINER(s) Pam Harrington Eric Atkinson
PNC Stipa comata / Bouteloua gracilis CT ___
SITE 4 pac Flunking STATE MT COUNTY BEAV
PURP G PREC S QUADNAME DALYS QUADCODE 4511217
9S T/ 10W R/ 19 S/ NE4S/ SW4/4 COMMUNITY SIZE (acres) ___
PLOT TYPES C PLTRL 25.8 PLOT W ___ SURVEY AVL
PHOTOS ___
DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___
VIAB ___ Com: ___
DEFN ___ Com: ___
RANK ___ Com: ___

MGMT: ___
PROT: ___

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: 3 S+ 40 G+ 40 R+ 10 L+ ___ W+ ___ M+ 3 BV+ 20 = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H20 ___ Dist. from H20 ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ___

PLOT NO. E-14 NO. SPECIES 14 PNC STICom / BOUGRA

TREES Tot Cv — MHt ___
Tal Cv ___ Med Cv ___
Low Cv ___ Grd Cv ___

		CC
T 1	/	
T 2	/	
T 3	/	
T 4	/	
T 5	/	

SHRBS Tot Cv 10 MHt 1'
Tal Cv — Med Cv 1
Low Cv 3 Grd Cv 10

		CC
S 1 Artemesia frigida	/ ARTFRI	3
S 2 Gutierrezia Sarothrae	/ GUTSAR	1
S 3 Chrysothamnus nauseosus	/ CHRNAU	3
S 4 Juniperus communis	/ JUNCOM	1
S 5 Artemesia tripartita	/ ARTTRI	1
S 6	/	
S 7	/	
S 8	/	
S 9	/	
S10	/	
S11	/	
S12	/	

GRAM Tot Cv 20 MHt .2'
Med Cv T Low Cv 20
Grd Cv 3

		CC
G 1 Stipa comata	/ STICOM	20
G 2 Muhlenbergia cuspidata	/ MUHCUS	T
G 3 Agropyron spicatum	/ AGRSPI	1
G 4	/	
G 5	/	
G 6	/	
G 7	/	
G 8	/	
G 9	/	
G10	/	
G11	/	
G12	/	

FRBS Tot Cv 3 MHt .2'
Med Cv — Low Cv —
Grd Cv 3

		CC
F 1 Senecio canus	/ SENCAN	1
F 2 Lactuca spp	/ LAC	1
F 3 Phlox hoodii	/ PHLHOO	1
F 4 Sedum lanceolatum	/ SEDLAN	1
F 5 Eriogonum chrysops	/ ERICHR	T
F 6 Erigeron compositus	/ ERICOM	T
F 7	/	
F 8	/	
F 9	/	
F10	/	
F11	/	
F12	/	
F13	/	
F14	/	
F15	/	

FERN Tot Cv — MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___
BRYO/LICH Tot Cv —

COMMENTS (EODATA) --> ___

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL ___ UNITS X ft __ m
PLOT NO. F-15 MO 07 DAY 01 YEAR 92 EOCODE ___ *___
EXAMINER(s) Pam Harrington Eric Atkinson
PNC Agropyron spicatum / Poa sandbergii CT ___
SITE Poa secunda / Agr STATE MT COUNTY BEAV
PURP G PREC S QUADNAME BANNACK QUADCODE 45112288
7S T/ 11W R/ 35S/ SE4S/ NE4/4 COMMUNITY SIZE (acres) ___
PLOT TYPES C PLTRL 25.Y PLOT W ___ SURVEY AYL
PHOTOS ___
DIRECTIONS --> ___

CONSERVATION RANKING

COND ___ Com: ___
VIAB ___ Com: ___
DEFN ___ Com: ___
RANK ___ Com: ___

MGMT: ___
PROT: ___

ENVIRONMENTAL FEATURES

DL Shrub SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM ___ LANDFORM ___ PLOT POS ___ SLP SHAPE ___ ASP ___
SLOPE % ___ ELEVATION ___ EROS POTENT ___ EROS TYPE ___
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP ___ IFVAL ___
SPFE ___
GROUND COVER: ___ S+ 70 G+ 10 R+ 10 L+ ___ W+ ___ M+ 10 BV+ 1 O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ___

RIPARIAN FEATURES: Channel Width ___ Channel Entrench ___
Surface Water ___ Ht.Abv.H20 ___ Dist. from H20 ___

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

OCULAR PLANT SPECIES DATA

PltIDL ___

PLOT NO. F-15 NO. SPECIES 11 PNC AVG'R SPI / POA SAN

TREES Tot Cv — MHt ___
Tal Cv ___ Med Cv ___
Low Cv ___ Grd Cv ___

		CC
T 1	/	
T 2	/	
T 3	/	
T 4	/	
T 5	/	

SHRBS Tot Cv 10 MHt .8'
Tal Cv — Med Cv T
Low Cv 10 Grd Cv T

		CC
S 1	Butierezia sarothrae / GUTSAR	1
S 2	Artemesia frigida / ARTFRI	3
S 3	Chrysothamnus nauseosus / CHRNAU	9
S 4	/	
S 5	/	
S 6	/	
S 7	/	
S 8	/	
S 9	/	
S10	/	
S11	/	
S12	/	

GRAM Tot Cv 10 MHt 1'
Med Cv 10 Low Cv 3
Grd Cv — CC

G 1	Agropyron spicatum / AGRSPI	10
G 2	Bromus tectorum / BROTEC	1
G 3	/	
G 4	/	
G 5	/	
G 6	/	
G 7	/	
G 8	/	
G 9	/	
G10	/	
G11	/	
G12	/	

FRBS Tot Cv 10 MHt .5'
Med Cv T Low Cv 10
Grd Cv 3 CC

F 1	Phacelia hastata / PHAHAS	9	F-11 X
F 2	Chaenactis douglasii / CHADOU	1	
F 3	Lewisia pygmaea / LEWPYG	T	F-13 X
F 4	Eriogonum strictum / ERISTR	T	
F 5	Mentzelia laevicaulis / MENLAE	T	
F 6	Eriogonum microthecum / ERIMIC	10	
F 7	/		
F 8	/		
F 9	/		
F10	/		
F11	/		
F12	/		
F13	/		
F14	/		
F15	/		

FERN Tot Cv — MHt ___ Med Cv ___
Low Cv ___ Grd Cv ___

BRYO/LICH Tot Cv /

COMMENTS (EODATA) --> ___

Ferruginous Hawk (*Buteo regalis*) Inventories on the Dillon Resource Area of Southwest Montana; 1992

by

Eric C. Atkinson

Montana Natural Heritage Program
1515 East Sixth Avenue
Helena, Montana 59620

for the

Bureau of Land Management
Dillon Resource Area
Dillon, Montana 59725

Cooperative Challenge Cost Share Program
Montana Natural Heritage Program
Bureau of Land Management

December 1992

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Montana Natural Heritage Program
Bureau of Land Management

December 1992

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS X ft __m
PLOT NO. 92PHG01 MO 07 DAY 07 YEAR 92 EOCODE_____ *___
EXAMINER(s): PWarnicolan
PNC Salix drummondiana CT_____
SITE Jungle Pk #1 STATE MT COUNTY LINCOLN
PURP___ PREC___ QUADNAME_____ QUADCODE_____
32 T/ 26 R/ 13 S/ NW4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL 13.1 PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT ___
SOIL UNIT ___ SOIL TAXON ___
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE %_____ ELEVATION ~4700 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 0 S+ 10 G+ 5 R+ 30 L+ 0 W+ 60 M+ 10 BV+ 0 O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS X ft __m
PLOT NO. 92PH002 MO 07 DAY 07 YEAR 92 EOCODE_____ *___
EXAMINER(s) Pam Hartman
PNC Phlox lanuginosa / Calamagrostis CT_____
SITE Swan R. #2 canadensis/Rose STATE MT COUNTY LINCOLN
PURP___ PREC/ QUADNAME_____ QUADCODE_____
32 T/ 26 R/ 13 S/ NW 4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE %_____ ELEVATION ~4700 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 3 S+ 0 G+ 0 R+ 20 L+ 0 W+ 50 M+ 22 BV+ 0 O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> _____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m

PLOT NO. 92PH003 MO 07 DAY 08 YEAR 92 EOCODE_____ *___

EXAMINER(s) Pam Harrington

PNC Carex rostrata ? CT_____

SITE Twin Meadows H.O STATE MT COUNTY Flathead

PURP_____ PREC___ QUADNAME_____ QUADCODE_____

32 T/ 26 R/ 20 S/ SW 4S/ ___ 4/4 COMMUNITY SIZE (acres)_____

PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____

PHOTOS_____

DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____

VIAB ___ Com: _____

DEFN ___ Com: _____

RANK ___ Com: _____

MGMT: _____

PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____

SOIL UNIT_____ SOIL TAXON_____

PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____

SLOPE %_____ ELEVATION 3880 EROS POTENT_____ EROS TYPE_____

HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP_____ IFVAL_____

SPFE_____

GROUND COVER: — S+ — G+ — R+ 20 L+ — W+ 20 M+ 10 BV+ 50 O-W 0 100%

DISTURBANCE HISTORY (type, intensity, frequency, season) --> ____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____

Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PHOD4 MO 07 DAY 08 YEAR 92 EOCODE_____*___
EXAMINER(s) Pam Harrington
PNC Salix drummondiana CT_____
SITE Twin Meadows STATE MT COUNTY Flathead
PURP ___ PREC___ QUADNAME_____ QUADCODE_____
32 T/ 26 R/ 20 S/ SW 4 S/ ___ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE % _____ ELEVATION 3440 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 10 S+ 1 G+ — R+ 30 L+ 1 W+ 30 M+ 30 BV+ —O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____Channel Entrench_____
Surface Water_____Ht.Abv.H20_____Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS X ft __m
PLOT NO. 92PHD055 MO 07 DAY 02 YEAR 92 EOCODE_____*___
EXAMINER(s) Pam Harrington
PNC Scirpus acutus CT_____
SITE Dudley Slough West STATE MT COUNTY Lincoln
PURP____ PREC____ (QUADNAME_____ QUADCODE_____
34 T/ 26 R/ 14 S/ 4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE % _____ ELEVATION 3490 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W____ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 30 S+ — G+ — R+ 50 L+ — W+ 20 M+ 10 BV+ — O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PH006 MO____ DAY___ YEAR____ EOCODE_____*___
EXAMINER(s) Pam Harrington
PNC Salix community CT_____
SITE Willow Swamp STATE MT COUNTY Lincoln
PURP___ PREC___ QUADNAME_____ QUADCODE_____
34 T/ 26 R/ 14 S/ 4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE %_____ ELEVATION 3400 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 10 S+ 0 G+ 0 R+ 40 L+ 0 W+ 20 M+ 30 BV+ 0 O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____Channel Entrench_____
Surface Water_____Ht.Abv.H20_____Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m

PLOT NO. 92PH0007 MO____ DAY___ YEAR____ EOCODE_____ *___

EXAMINER(S) Pam Mattingly

PNC Typha latifolia J CT_____

SITE mine site STATE MT COUNTY Lincoln

PURP____ PREC___ QUADNAME_____ QUADCODE_____

34 T/ 25 R/ 7 S/ SE 4S/ 4/4 COMMUNITY SIZE (acres)_____

PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____

PHOTOS_____

DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____

VIAB ___ Com: _____

DEFN ___ Com: _____

RANK ___ Com: _____

MGMT: _____

PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____

SOIL UNIT_____ SOIL TAXON_____

PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____

SLOPE % _____ ELEVATION 3020 EROS POTENT_____ EROS TYPE_____

HORIZON ANGLE (%): N____E____S____W____ IFSLP_____ IFVAL_____

SPFE_____

GROUND COVER: 20 S+ 0 G+ 0 R+ 30 L+ 0 W+ 30 M+ 20 BV+ 0 O = 100%

DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____

Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PH008 MO 07 DAY 10 YEAR 92 EOCODE_____ *___
EXAMINER(s) Pam Harrington
PNC Carex buxbaumii J CT_____
SITE 11 mile hill E STATE MT COUNTY Lincoln
PURP(PREC QUADNAME QUADCODE_____
34 T/ 25 R/ 35 S/ NE4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->

CONSERVATION RANKING

COND ___ Com:
VIAB ___ Com:
DEFN ___ Com:
RANK ___ Com:

MGMT:
PROT:

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE % _____ ELEVATION 3280 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 10 S+ 0 G+ 0 R+ 20 L+ 0 W+ 30 M+ 30 BV+ 0 O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H2O_____ Dist. from H2O_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PH-009 MO 07 DAY 10 YEAR 92 EOCODE_____ *___
EXAMINER(s) Pam Hamilton
PNC Carex buxbaumii CT_____
SITE Hunter Ck. #3 STATE MT COUNTY Lincoln
PURP 0 PREC___ QUADNAME_____ QUADCODE_____
34 T/ 35 R/ 36 S/ NW4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE %_____ ELEVATION 3220 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 10 S+ — G+ — R+ 30 L+ — W+ 30 M+ 20 BV+ — O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)-->_____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS X ft __m
PLOT NO. 92PHd10 MO 07 DAY 11 YEAR 92 EOCODE_____ *___
EXAMINER(s) Pam Darrington
PNC Abies lasiocarpa / Calamagrostis canadensis CT_____
SITE Big Hanson Lake #1 STATE MT COUNTY Lincoln
PURP ___ PREC___ QUADNAME Ksanka Peak QUADCODE 4811488
37 T/25 R/32S/NW4S/___4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com:_____
VIAB ___ Com:_____
DEFN ___ Com:_____
RANK ___ Com:_____

MGMT:_____
PROT:_____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE % _____ ELEVATION 5560+ EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N____E____S____W____ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 10 S+ — G+ 3 R+ 10 L+ 50 W+ 30 M+ 50 BV+ — O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____Channel Entrench_____
Surface Water_____Ht.Abv.H20_____Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PH011 MO 07 DAY 11 YEAR 92 EOCODE_____ *___
EXAMINER(s) Pam Herrington
PNC Carex rostrata CT_____
SITE Big Thicault Lake #2 STATE MT COUNTY Lincoln
PURP PREC___ QUADNAME Kisanka Peak QUADCODE 4811488
37 T/ 25 R/ 32S/ NW4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com:
VIAB ___ Com:
DEFN ___ Com:
RANK ___ Com:

MGMT:
PROT:

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE %_____ ELEVATION 5540+ EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 3 S+ — G+ — R+ 20 L+ — W+ 60 M+ 20 BV+ — O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PH0612 MO 07 DAY 11 YEAR 92 EOCODE_____ *___
EXAMINER(s) Pam Hollinger
PNC Abies lasiocarpa / Cladonia gracilis CT
SITE Big Hanging Lake abies canadensis STATE MT COUNTY Lincoln
PURP___ PREC___ QUADNAME Ksenka Peak QUADCODE 48114B8
37 T/ 25 R/ 32 S/ NW4S/ ___4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE %_____ ELEVATION 5560+ EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N____E____S____W____ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: — S+ — G+ / R+ 10 L+ / W+ 60 M+ 20 BV+ — O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PH013 MO 07 DAY 11 YEAR 92 EOCODE_____ *___
EXAMINER(s) Mr. Hamilton
PNC Abies lasiocarpa / Calamagrostis CT_____
SITE Divide Creek canadensis STATE MT COUNTY Lincoln
PURP___ PREC___ QUADNAME Stahl QUADCODE 4811487
37T/24 R/19S/ 4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE % _____ ELEVATION 5100 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___ E___ S___ W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 10 S+ — G+ 3 R+ 50 L+ 3 W+ 30 M+ 20 BV+ — O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> _____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m

PLOT NO. 92PH0614 MO 07 DAY 12 YEAR 92 EOCODE_____*___

EXAMINER(s) Pam Hamilton

PNC Canyon ridge tops CT_____

SITE Tom Poole North STATE MT COUNTY Lincoln

PURP___ PREC___ QUADNAME_____ QUADCODE_____

33 T/ 31 R/ 28 S/ NE 4/4 COMMUNITY SIZE (acres)_____

PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____

PHOTOS_____

DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____

VIAB ___ Com: _____

DEFN ___ Com: _____

RANK ___ Com: _____

MGMT: _____

PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____

SOIL UNIT_____ SOIL TAXON_____

PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____

SLOPE %_____ ELEVATION 2400 EROS POTENT_____ EROS TYPE_____

HORIZON ANGLE (%): N____E____S____W____ IFSLP_____ IFVAL_____

SPFE_____

GROUND COVER: 2 S+ — G+ 3 R+ 20 L+ 10 W+ 40 M+ 20 BV+ — O = 100%

DISTURBANCE HISTORY (type, intensity, frequency, season)--> _____

RIPARIAN FEATURES: Channel Width_____Channel Entrench_____

Surface Water_____Ht.Abv.H20_____Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PH015 MO 07 DAY 12 YEAR 92 EOCODE_____ *___
EXAMINER(s) Pam Harrington
PNC Carex rostrata CT_____
SITE Top Peak South STATE MT COUNTY Lincoln
PURP___ PREC___ QUADNAME_____ QUADCODE_____
33 T/ 3i R/ 28S/ SE 4S/ 4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE % _____ ELEVATION 3440 EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: _ S+ _ G+ _ R+ 10 L+ _ W+ 70 M+ 20 BV+ _ O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> _____

RIPARIAN FEATURES: Channel Width_____ Channel Entrench_____
Surface Water_____ Ht.Abv.H20_____ Dist. from H20_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

COMMUNITY SURVEY FORM

MTNHP
5/27/91

GENERAL PLOT DATA

IDENTIFICATION AND LOCATION

MANUAL_____ UNITS __ft __m
PLOT NO. 92PH016 MO 07 DAY 12 YEAR 92 EOCODE_____ *___
EXAMINER(s) Pam Harrington
PNC Carex rostrata / Carex aquatilis CT_____
SITE Pat Creek Meadows Phase STATE_____ COUNTY_____
PURP___ PREC___ QUADNAME_____ QUADCODE_____
37 T/ 33 R/ 13E S/ ___4S/ ___4/4 COMMUNITY SIZE (acres)_____
PLOT TYPES_____ PLTRL_____ PLOT W_____ SURVEY_____
PHOTOS_____
DIRECTIONS -->_____

CONSERVATION RANKING

COND ___ Com: _____
VIAB ___ Com: _____
DEFN ___ Com: _____
RANK ___ Com: _____

MGMT: _____
PROT: _____

ENVIRONMENTAL FEATURES

DL_____ SOIL RPT_____
SOIL UNIT_____ SOIL TAXON_____
PM_____ LANDFORM_____ PLOT POS_____ SLP SHAPE_____ ASP_____
SLOPE % _____ ELEVATION 4250' EROS POTENT_____ EROS TYPE_____
HORIZON ANGLE (%): N___E___S___W___ IFSLP_____ IFVAL_____
SPFE_____
GROUND COVER: 10 S+ 0 G+ 0 R+ 40 L+ 0 W+ 20 M+ 30 BV+ 0 O = 100%
DISTURBANCE HISTORY (type, intensity, frequency, season)--> ____

RIPARIAN FEATURES: Channel Width_____Channel Entrench_____
Surface Water_____Ht.Abv.H2O_____Dist. from H2O_____

GENERAL SITE DESCRIPTION (landscape features and adjacent ct's)

MAYBEE MEADOWS
Preliminary Flora of wetland habitat
24 Oct 1992

SCIENTIFIC NAME*

Moss hummock habitat
Sphagnum spp. dominant in groundcover layer on hummocks
Carex utricularia dominant in herbaceous layer
Salix planifolia dominant in short shrub layer
Betula glandulosa
Carex aquatilis
C. atherodes
Pyrola elliptica
Senecio integerrimus
Calamagrostis canadensis
Pedicularis bracteosa
Poa (reflexa)
Geum (macrophyllum)
Lupinus (argenteus)
Potentilla spp.
UFOs (unidentified forbs observed)
Pinus contorta (becoming established on few hummocks and making up the surrounding prevalent upland forest cover)

Sedge meadow habitat (no moss or shrub cover; lying within previous habitat)
Carex (praeceptorum/bipartita/brunnescens) dominant
Carex praegracilis
Calamagrostis canadensis
Carex (lasiocarpa)
Alopecurus (pratensis) - introduced
Agrostis scabra - introduced

Willow thicket margin
Salix (drummondiana) dominant

*Genera with the species names in parantheses should be cited using "spp."

Table 1. Sites trapped during 1992 northern bog lemming surveys.

Site		Elev.	Date	Trap nights snap	live	pit
KOOTENAI NATIONAL FOREST						
Fortine District						
#*Sunday Creek, Lincoln Co.	T32N R26W S13	4800	4-7 July	361		
"			21-24 July		477	50
"			17-21 Aug		638	100
#Twin Meadows Creek, Lincoln Co.	T32N R26W S20	3900	3-7 July	428		
#Dudley Slough, Lincoln Co.	T34N R26W S14	3400	30 Jun-4 Jul	387		
#Ant Flats, Lincoln Co.	T34N R25W S7	3020	30 Jun-4 Jul	288		
#Jumbo Lake, Lincoln Co.	T34N R25W S35&36	3300	30 Jun-4 Jul	324		
#Big Therriault Lake, Lincoln Co.	T37N R25W S32	5600	7-10 July	240		
#Divide Creek, Lincoln Co.	T37N R24W S19	5600	7-10 July	252		
Three Rivers District						
*Hawkins Pond, Lincoln Co.	T37N R33W S18	6200	26 July	5		
#Pete Creek Meadow, Lincoln Co.	T37N R33W S13&24	4300	24-27 July	423		
Libby District						
Loon Lake, Lincoln Co.	T33N R32W S24&25	3600	21-25 June	250	200	
Rainbow Lake, Lincoln Co.	T33N R31W S6&7	4200	21-25 June	150	240	
#Tom Poole Lake, Lincoln Co.	T33N R31W S28	3400	21-25 June	150	200	
Tepee Lake, Lincoln Co.	T28N R30W S25	4200	17-21 June		553	3
Cabinet District						
Rock Creek Meadow, Sanders Co.	T26N R31W S6	3800	3-5 Aug	290		
FLATHEAD NATIONAL FOREST						
Tally Lake District						
*Bowen Creek, Lincoln Co.	T31N R26W S1	4760	18-19 Aug	114		
Hellroaring Basin, Flathead Co.	T32N R22W S35	4600	21-23 July	272		
BEAVERHEAD NATIONAL FOREST						
Wisdom District						
Schultz Crk trib., Beaverhead Co.	T1N R17W S31	8100	13-17 July	306		
Schultz Saddle, Beaverhead Co.	T1S R18W S2	7840	13-17 July	404		
Tie Creek meadows, Beaverhead Co.	T1S R18W S2	7360	15-18 July	279		
*Maybee Meadows, Beaverhead Co.	T1S R17W S26	6520	13-15 July	140		
BITTERROOT NATIONAL FOREST						
Sula District						
*Meadow Creek, Ravalli Co.	T1N R18W S10	5920	17-18 July	97		
Grand Total				5160	2308	153

*= Synaptomys found at this site
#= Plant community survey done at this site

APPENDIX D

Legal descriptions and habitat associations of Ferruginous Hawk nests observed in southwest Montana (1992).

AREA	LOCATION	STATUS	ASSOCIATION
Armstead	T12S,R09W,S01,SENESE	INACTIVE	SS
	T11S,R08W,S31,NENESW	INACTIVE	FP
	T12S,R09W,S35,SESENW	INACTIVE	SS
Bannack	T07S,R11W,S35,SENENW	ACTIVE	SS
	T07S,R11W,S36,SWNESW	INACTIVE	SS
	T07S,R11W,S36,SWNWNW	INACTIVE	SS
	T07S,R11W,S36,SWNWNW	INACTIVE	SS
	T07S,R11W,S35,SENENE	INACTIVE	SS
	T07S,R11W,S36,SWNESW	INACTIVE	SS
	T07S,R11W,S36,SWNWNW	INACTIVE	SS
	T07S,R11W,S35,NESWNW	INACTIVE	SS
Block Mtn.	T04S,R08W,S16,SESWSW	ACTIVE	SS
Diamond Butte	T15S,R06W,S08,NESENE	ACTIVE	SS
	T15S,R06W,S07,SWSWNE	ACTIVE	SS
Frying Pan	T06S,R09W,S20,SENESW	ACTIVE	FP
	T06S,R09W,S18,SWSESE	ACTIVE	SS
	T06S,R09W,S18,SWNENW	ACTIVE	SS
	T06S,R09W,S17,SWSENE	ACTIVE	FP
	T06S,R09W,S08,NESENE	ACTIVE	SS
	T06S,R09W,S32,NWSWNE	ACTIVE	FP
	T07S,R09W,S04,NESENW	ACTIVE	SS
	T06S,R09W,S33,SWNWNW	ACTIVE	FP
	T06S,R09W,S18,SWNWSE	INACTIVE	SS
	T07S,R09W,S05,NENESW	INACTIVE	FP
	T06S,R09W,S18,SWNENW	INACTIVE	SS
	T06S,R09W,S18,SWNENW	INACTIVE	SS
	T06S,R09W,S18,SWNWSE	INACTIVE	SS
	T07S,R10W,S01,NENWNW	INACTIVE	FP
	T06S,R09W,S28,NWNWSE	INACTIVE	SS
	T06S,R09W,S20,SENESW	INACTIVE	FP
	T07S,R09W,S03,NESESW	INACTIVE	SS
	T06S,R09W,S08,NESWNE	INACTIVE	SS
	T06S,R09W,S28,NWNWSE	INACTIVE	SS
	T06S,R10W,S25,NESESW	INACTIVE	SS
Henneberry Ridge	T09S,R10W,S19,NESWNE	ACTIVE	MM
	T08S,R11W,S35,NENWNW	INACTIVE	SS
	T08S,R11W,S35,SENENW	INACTIVE	SS
	T09S,R11W,S24,SENWSW	INACTIVE	MM
	T08S,R11W,S25,SESWNE	INACTIVE	SS
	T09S,R11W,S25,NENWNW	INACTIVE	SS
	T09S,R11W,S12,NENESW	INACTIVE	SS
	T08S,R11W,S25,SESENE	INACTIVE	SS
	T09S,R11W,S12,NENESW	INACTIVE	SS

AREA	LOCATION	STATUS	ASSOCIATION
Sweetwater	T08S,R05W,S27,SWNWSE	ACTIVE	FP
	T08S,R05W,S27,SWNWSE	INACTIVE	FP
	T08S,R05W,S27,NWNENE	INACTIVE	FP
Vinegar Hill	T12S,R07W,S28,SESESE	ACTIVE	FP
	T12S,R07W,S20,SENESE	INACTIVE	FP
	T12S,R07W,S28,SESWSW	INACTIVE	FP
Incidental	T14S,R06W,S33,SESENE	ACTIVE	FP

SS = Sagebrush Steppe
FP = Foothill Prairie
MM = Mountain Mahogany

APPENDIX E

Legal descriptions of other raptor nests observed while performing Ferruginous Hawk surveys in southwest Montana (1992).

ACCO USA
WHEELING, ILLINOIS 60090
ITEM NO. 25978
50505 25978 6
RED/ROUGE/ROJO
MADE IN USA